ESSR Journal Club

Covered Article: “The Importance of Muscle Capillarization for Optimizing Satellite Cell Plasticity”
Authors: Joshua P. Nederveen, Milan W. Betz, Tim Snijders, and Gianni Parise
Issue: Exercise and Sport Sciences Reviews. 49(4), October 2021

1) What is the main function of satellite cells in adult muscle?

2) How do satellite cells contribute to muscle regeneration and repair?

3) Describe the interaction between satellite cells and endothelial cells.

4) Describe the association between satellite cells and capillaries following exercise/damage in humans.

5) Focusing on capillarization, muscle cross-sectional area, and satellite cell content, list the changes that occur in skeletal muscle during aging.

6) Explain how these age-related structural changes contribute to incomplete repair of skeletal muscle tissue.

7) Explain how exercise training may improve satellite cell activation and repair following an injury.